

IN THE CLAIMS

1. (Cancelled)

Claim 2 has been amended as follows:

2. (Currently amended) ~~[[A]]~~ The network as claimed in claim 17 wherein said expert ~~evaluation~~ system is programmed and trained to use said ~~modified~~ expert rule previously unknown correlation to devise a measurement protocol.

Claim 3 has been amended as follows:

3. (Currently amended) ~~[[A]]~~ The network as claimed in claim 2 wherein said expert system is programmed and trained to use said measurement protocol for a selected pathology.

Claim 4 has been amended as follows:

4. (Currently amended) ~~[[A]]~~ The network as claimed in claim 2 wherein said expert ~~evaluation~~ system is programmed and trained to automatically devise said measurement protocol.

Claim 5 has been amended as follows:

5. (Currently amended) ~~[[A]]~~ The network as claimed in claim ~~[[2]]~~ 17 further comprising a memory containing a plurality of measurement protocols accessible by said remote server, and wherein each point of care test device has access to said memory, via said data link, to obtain a selected measurement protocol for performing said diagnostic testing.

Claim 6 has been amended as follows:

6. (Currently amended) ~~[[A]]~~ The network as claimed in claim ~~[[5]]~~ 2 wherein said expert ~~evaluation~~ system is programmed and trained to devise said measurement protocol ~~[[is]]~~ for a specific pathology by testing a predetermined number of said biomolecular markers.

Claim 7 has been amended as follows:

7. (Currently amended) ~~[[A]]~~ The network as claimed in claim 6 wherein said biochips are sensitive for more biomolecular markers than said predetermined number of biomolecular markers, and wherein the measurement protocol operates the respective measurement unit of each point of care test device to execute said diagnostic testing on the biomolecular markers in the sample of the tested biochip to obtain augmented testing data in said raw point of care data.

Claim 8 has been amended as follows:

8. (Currently amended) ~~[[A]]~~ The network as claimed in claim 17 wherein said point of care data entry stations comprise means for entering patient history data into said electronic patient record characterizing whether said diagnostic result was a false positive, a false negative or correct.

9. (Cancelled)

Claim 10 has been amended as follows:

10. (Currently amended) ~~[[A]]~~ The method as claimed in claim 18 comprising using said previously unknown correlation to devise ~~wherein the step of creating a modified expert rule comprises creating a modified expert rule for devising a measurement protocol.~~

Claim 11 has been amended as follows:

11. (Currently amended) ~~[[A]] The method as claimed in claim 10 comprising using said previously unknown correlation to devise wherein the step of creating a modified rule comprises creating a modified rule for a measurement protocol for a selected pathology.~~

Claim 12 has been amended as follows:

12. (Currently amended) ~~[[A]] The method as claimed in claim 11 comprising using said previously unknown correlation to 10 wherein the step of creating a modified rule comprises automatically creating a modified rule for devise said measurement protocol.~~

Claim 13 has been amended as follows:

13. (Currently amended) ~~[[A]] The method as claimed in claim [[10]] 18 further comprising storing a plurality of measurement protocols in a memory accessible from said remote server, and wherein the step of performing diagnostic testing in each point of care test device comprises establishing a data communication between a point of care test device and said memory to obtain a selected measurement protocol from said memory for use in said point of care test device for performing said diagnostic testing.~~

Claim 14 has been amended as follows:

14. (Currently amended) ~~[[A]] The method as claimed in claim 13 wherein each of said measurement protocol protocols employs a predetermined number of said biomolecular markers.~~

Claim 15 has been amended as follows:

15. (Currently amended) ~~[[A]]~~ The method as claimed in claim 14 comprising providing more biomolecular markers in each sample than said predetermined number and wherein the step of performing diagnostic testing includes performing diagnostic testing using said selected measurement protocol and also employing additional biomolecular markers in the sample of the tested biochip, beyond said predetermined number, to obtain augmented testing data, and including said augmented testing data in said raw point of care data.

Claim 16 has been amended as follows:

16. (Currently amended) ~~[[A]]~~ The method as claimed in claim 18 comprising obtaining said follow-up data by conducting a follow-up examination of the tested patient to determine follow-up data indicating whether said test result was a false positive, a false negative or correct.

Claim 17 has been amended as follows:

17. (Currently amended) A network for analyzing medical data ~~creating a modified diagnostic expert rule~~, comprising:

- a plurality of disposable biochips, each sensitive for multiple biomolecular markers, respectively for a plurality of patients, each biochip containing a patient sample with multiple biomolecular markers;
- a plurality of point of care test devices respectively at a plurality of point of care sites, each point of care test device having an interface in which at least one of said biochips is inserted, as a tested biochip, and having a measurement unit that performs diagnostic testing on the multiple

biomolecular markers of the sample in said tested biochip to obtain raw point of care data;

an expert system to which said raw point of care data is entered, as an input, that produces a diagnostic result from said expert system using an expert rule that identifies a medical condition of the patient from a known correlation of at least one of said multiple biomolecular markers with said medical condition;

a plurality of electronic patient records respectively for said patients;

a plurality of point of care data entry stations respectively having access to at least one of said electronic patient records and respectively in communication with said point of care test devices, each data entry station including means for entering follow-up diagnostic data into the electronic patient record for the patient, as a tested patient, who provided the test sample in the tested biochip;

a remote server and an evaluation system accessible by said remote server;

said remote server having at least one data link to each point of care test device and each electronic patient record, for transmitting said point of care raw data of said patient and an identification of said expert rule used to produce said diagnostic result, and said follow-up diagnostic data, to said remote server; and

said evaluation system comprising a computer that uses all of said point of care raw data and all of said follow-up diagnostic data as a training data set that identifies a previously unknown correlation of at least one further biomolecular marker, among said multiple biomolecular

markers, other than said at least one of said multiple biomolecular markers having said known correlation with said medical condition, with a different medical condition represented in said follow-up diagnostic data.

Claim 18 has been amended as follows:

18. (Currently amended) A method for analyzing medical data ~~creating a modified diagnostic expert rule~~, comprising the steps of:

obtaining a plurality of samples respectively from a plurality of patients and storing the samples respectively in a plurality of disposable biochips, each biochip being sensitive for multiple biomolecular markers;

providing a plurality of point of care test devices respectively at a plurality of point of care sites;

respectively receiving said biochips in said point of care test devices, each as a tested biochip, and in each point of care test device performing diagnostic testing on the sample in the tested biochip to obtain raw point of care data;

entering the raw point of care data as an input to an expert system and producing a diagnostic result with said expert system using an expert rule that identifies a medical condition of the patient from a known correlation of at least one of said multiple biomolecular markers with said medical condition;

providing a remote server at a location remote from said point of care sites;

supplying the raw point of care data and an identification of said expert rule from all of the point of care sites, and the follow-up diagnostic data, to said remote server; and

at said remote server, using all of said point of care data and all of said follow-up diagnostic data as a training data set to identify a previously unknown correlation of at least one further biomolecular marker, among said multiple biomolecular markers, other than said at least one of said multiple biomolecular markers having said known correlation with said medical condition, with a different medical condition represented in said follow-up diagnostic data.